Volume 1

Facility-Wide SPCC Plan

Fort Carson, Colorado



Prepared by



Shaw Environmental, Inc. 5050 Section Avenue Cincinnati, OH 45212

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

NAME OF FACILITY: U.S. DOD, U.S. Army – Fort Carson

FACILITY ADDRESS: Directorate of Environmental Compliance and

Management

1638 Elwell Street/Building 6236 Fort Carson, CO 80913-4356

Latitude: 038 degrees, 45 min., 45 sec. Longitude: 104 degrees, 74 min., 45 sec.

El Paso, Pueblo, and Fremont Counties

(portions)

QUALIFIED INDIVIDUAL: Edward Tebo

Pollution Prevention Program Manager

(719) 524-3534 - day (719) 597-0153 - evening (719) 338-1625 - cell

INSTALLATION FIRE DEPARTMENT: 911 (if using cellular telephone, inform operator

that call is being placed from Fort Carson)

FT. CARSON DECAM

FT. CARSON SAFETY OFFICE

EMERGENCY OPERATION CENTER

MILITARY POLICE

COLORADO SPRINGS FIRE DEPARTMENT

526-2022

526-2123

526-2133

99-911

U.S. EPA NATIONAL RESPONSE CENTER (800) 424-8802

DEPARTMENT OF THE ARMY

HEADQUARTERS, FORT CARSON

FORT CARSON, COLORADO 80913-5000

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN



REVIEWED BY:

THOMAS L. WARREN

Director

Directorate of Environmental Compliance and Management

APPROVED BY:

MICHAEL RESTY, JR.

COLONEL, US ARMY Garrison Commander

January 2004

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CERTIFICATION BY PROFESSIONAL ENGINEER

5-60535

Pursuant to 40 CFR 112.3(d), I hereby testify that I or my designated agent have visited the Fort Carson, Colorado, facility and that I am familiar with the requirements of 40 CFR 112, Army Regulation 200-1, and the information contained in this Spill Prevention, Control, and Countermeasure Plan (SPCCP). This SPCCP has been prepared in accordance with good engineering practices, including consideration of applicable industry standards and in accordance with the requirements of 40 CFR 112. To the best of my knowledge and beliefs, the information contained in this SPCCP is true, complete, and accurate and is adequate for the Ft. Carson facility.

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REVIEWED BY:

Rajib Sinha, P.E

Registration No.:

Shaw Environmental, Inc.

N:\3\JANZ\Ft.	Carson\2004	SPCC\2004	Final SPC	C.DOC

40 CFR 112 REFERENCE MATRIX

40 CFR -	Requirements	Fort Carson's SPCCP	Page
112.7	General requirements for SPCC Plans.	This table identifies the location of the various SPCC Plan requirements within the Fort Carson plan.	n/a
112.7 (a)	SPCC Plan conformance, deviations, facility characteristics, spill reporting, emergency procedures.	SPCC Plan conformance and deviations Facility characteristics Facility diagrams	1-1 2-1 App. C
112.7 (b)	Fault analysis.	Predictions on the direction, rate, and quantity of flow during a spill event are included in the site-specific attachments for each building.	App. C
112.7 (c)	Secondary containment.	133 of the 145 aboveground storage tanks are ConVaults, with integral secondary containment. Secondary containment for other storage containers is discussed in Section 5 and 6.	5-2 5-1 to 6-2
112.7 (d)	Integrity testing/contingency plans.	Integrity testing is discussed in Section 5; a Facility Response Plan has been prepared for Fort Carson.	5-2
112.7 (e)	Inspections, tests, and records.	Inspections, tests, and records are discussed in Section 8.	8-3
112.7(f)	Personnel, training, and discharge prevention procedures.	Spill prevention procedures for each spill potential at this facility are presented in Section 5; Section 8.3 presents information concerning personnel training and record keeping.	5-1 to 5-10; 8-1
112.7 (g)	Site security requirements.	Section 8.2 describes security at Fort Carson.	8-1
112.7 (h)	Facility tank car and tank truck loading/unloading requirements.	Tank truck unloading is discussed in Section 3.4. Operations must meet the Fort Carson Tank Truck unloading standards and the regulations established by the Department of Transportation.	3-2
112.7 (i)	Brittle fracture evaluation requirements	No field-constructed aboveground containers are used at Ft. Carson.	n/a
112.7 (j)	Conformance with State requirements	The state of Colorado has no state SPCCP regulations.	n/a
112.8 (a)	General requirements	This SPCCP meets the discharge prevention and containment procedure requirements.	n/a
112.8 (b)	Facility drainage	Facility drainage is discussed in Section 6 and is shown on each site-specific building diagram.	6-11
112.8 (c)	Bulk storage containers	All tank materials used for oil storage are compatible with the material stored and the conditions of storage.	5-1; 5-2

40 CFR -	Requirements	Fort Carson's SPCCP	Page
112.8 (d)	Facility transfer operations	Underground piping/construction meets corrosion protection standards. There is no aboveground piping at Fort Carson.	5-1
112. 20	Substantial Harm Criteria and the need for a Facility Response Plan	The Certification of the Applicability of the Substantial Harm Criteria is located in the front of this Plan. Based upon this Certification, it has been determined that Fort Carson could cause substantial harm to the environment due to a discharge of oil to a navigable water or adjoining shoreline and, therefore, is required to have a Facility Response Plan.	viii
112. 21	Facility response training, drills, and exercises are required for sites that are required to have a Facility Response Plan.	Fort Carson has developed a Facility Response Plan and performs facility response training, drills, and exercises.	n/a

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

Fa	cility Name _	Fort Carson
Fa	cility Address	1638 Elwell Street, Building 6236, Fort Carson, CO 80913-4356
1.		ity transfer oil over water to or from vessels and does the facility have a total oil ty greater than or equal to 42,000 gallons?
	Ye	s Nox_
2.	and does the f capacity of the	ity have a total oil storage capacity greater than or equal to 1 million gallons acility lack secondary containment that is sufficiently large to contain the largest aboveground oil storage tank plus sufficient freeboard to allow for within any aboveground oil storage tank area?
	Ye	es Nox
3.	and is the faci Attachment C	ity have a total oil storage capacity greater than or equal to 1 million gallons lity located at a distance (as calculated using the appropriate formula in -III to this Appendix or a comparable formula*) such that a discharge from the cause injury to fish and wildlife and sensitive environments?
	Ye	es <u>x</u> No
4.	and is the faci Attachment C	ity have a total oil storage capacity greater than or equal to 1 million gallons lity located at a distance (as calculated using the appropriate formula in -III to this Appendix or a comparable formula*) such that a discharge from the shut down a public intake?**
	Ye	s No <u>x</u>
5.	and has the fa	ity have a total oil storage capacity greater than or equal to 1 million gallons cility experienced a reportable oil spill in an amount greater than or equal to s within the last 5 years?
	Ye	s No <u>x</u>
	If	

^{*} If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

^{**} For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

1.0 INTRODUCTION

1.1 PURPOSE AND FORMAT

The purpose of the Fort Carson Spill Prevention, Control, and Countermeasure Plan (SPCCP) is to provide specific methods that Fort Carson personnel can use to comply with the laws and regulations governing the prevention, control, and cleanup of accidental discharges of petroleum, oil, or lubricants (POL) and hazardous substances. The SPCCP is required to demonstrate that Fort Carson has implemented a program to prevent contamination of navigable waters by spills of POL or hazardous substances. A list of definitions pertinent to this plan is included in Appendix A.

Each building/area on Fort Carson that has a potentially harmful source of POL or hazardous substances is required to maintain a SPCCP at the facility to assist in the clean up accidental discharges of POL or hazardous substances. The inventory of POL and hazardous substances at Fort Carson is maintained by building number, not by facility name; therefore, the determination of the requirement of a SPCCP has been made on a building basis rather than a facility basis.

To ease development and management of the Fort Carson SPCCP program, the SPCCP for each building was split into two components. The first component is the base component that contains information pertinent to all Fort Carson buildings that require a SPCCP. The second component of the SPCCP is a building specific attachment that provides information specific to each individual building that requires a SPCCP, including a site diagram, the location of tanks, spill kits, overhead piping, etc. Therefore, a complete SPCCP for any given Fort Carson building will consist of the base component and the building specific attachment.

A copy of the base component and the building specific attachments for all Fort Carson buildings that require a SPCCP will be maintained at the Directorate of Environmental Compliance and Management (DECAM).

1.2 SCOPE

This SPCCP is in conformance with the revised SPCCP regulations that became effective on August 16, 2002 [Title 40 of the Code of Federal Regulations, Part 112 (40 CFR 112)]. It is intended to serve as a guide to all Fort Carson personnel, units, and activities involved in the handling, transfer, removal, or storage of POL or hazardous substances stored at Fort Carson and for training activities, record keeping, and personal safety. This plan will also offer guidance for persons involved in the inspection of these storage areas. The only deviation is that integrity testing is not performed on the ConVault tanks, per the recommendation of the manufacturer. However, inspections are conducted regularly to ensure there are no leaks from the tanks.

Prior to development of the SPCCP, each building on Fort Carson was evaluated to determine if potentially harmful sources of POL and hazardous substances are present. The buildings that contained potentially harmful sources of POL or hazardous substance are listed in Appendix B. Each building listed in Appendix B is required to maintain a SPCCP at the building.

1.3 REVIEWS AND AMENDMENTS

The SPCCP for each building/area will be kept current and available for review by the United States Environmental Protection Agency (USEPA); the state, county, or local enforcement agencies; and the Department of the Army. Changes in building/area facility design, construction, operation, or maintenance that materially affect the potential for spills of POL or hazardous substances, or any new construction projects that affect any part of this SPCCP will be reviewed by a registered Professional Engineer (PE) and reflected in this Plan within six months after the changes are made. At a minimum, the SPCCP will be reviewed by a registered PE and certified to have been reviewed, and/or amended, in accordance with good engineering practices, at least every five years. All reviews and/or amendments will be documented in this Plan.

Additionally, a review of this plan may be required by the USEPA Region VIII Administrator or the state or county enforcement agency if either of the following occurs:

- A single spill event during which more than 1,000 gallons (3,800 liters) of POL is discharged into the navigable waters of the United States
- Two reportable POL spills, each greater than 42 gallons or 1 barrel, occur within a 12-month period.

2.1 NAME OF INSTALLATION

The name of the installation for which this plan has been developed is Fort Carson, Colorado.

2.2 FUNCTION OF INSTALLATION

Fort Carson has evolved significantly since its initial year of operation in 1942. Its current missions are to provide the command, administrative, and logistical functions necessary to operate and maintain Fort Carson and to support active Army tenant units and other assigned activities. The primary units assigned to Fort Carson are the Third Armored Cavalry Regiment (3rd ACR), the 10th Special Forces Group (Airborne) [10th SFG(A)], the 3rd Brigade Combat Team (3rd BCT) and the 43rd Area Support Group (43rd ASG). The post also provides base operations support to other tenant activities, including a Medical Department Activity, Army Air Force Exchange Service (AAFES), United States Army Reserve (USAR), and the Colorado National Guard. In addition, Fort Carson provides support (as a training area) for various reserve and active duty units of the Department of Defense. Military operations at Fort Carson are under the control of the U.S. Army Forces Command (FORSCOM). Base operations are under the control of the Installation Management Agency (IMA), Northwest Region.

2.3 LOCATION OF INSTALLATION

Fort Carson is located in east-central Colorado at the base of the Rocky Mountain Front Range and includes sections of El Paso, Pueblo, and Fremont Counties. An installation location map is provided as Figure 2-1. Fort Carson encompasses 138,472 acres, measuring 24 miles (10.9 km) in a north-south direction and between 2 to 15 miles (0.9 - 6.8 km) in an east-west direction. The cantonment area, occupying 9,983 acres in the northern portion of Fort Carson, is located 8 miles (3.6 km) south of Colorado Springs and 39 miles (17.7 km) north of Pueblo. The cantonment area houses the troop quarters, hospital, Butts Army Air Field, industrial and vehicle maintenance facilities, and other tenant activities such as the Defense Reutilization and Marketing Organization (DRMO) at Fort Carson. Colorado State Road 115 delineates the western boundary of the reservation; Interstate 25 delineates its northeastern boundary. The major access points to Fort Carson are located in the northernmost portion of the reservation. Fort Carson also utilizes a training area, Pinon Canyon Maneuver Site (PCMS), Las Animas County, Colorado, that consists of 227,300 acres. PCMS will be covered in a separate SPCCP.

2.4 QUALIFIED INDIVIDUAL

The person designated by the Installation Commander, Fort Carson, to be the Qualified Person for coordinating responses to oil and hazardous substance spills is Mr. Edward Tebo, Pollution Prevention Program Manager. Mr. Tebo has received the Occupational Safety and Health Administration (OSHA) 40-hour hazardous materials training and annual 8-hour refresher courses and has 10 years of experience in handling spills.

In addition to Mr. Tebo, each building/area has an assigned Environmental Protection Officer (EPO) who serves as the point-of-contact and is held accountable for all environmental issues associated with that building/area.

2.5 MANAGEMENT APPROVAL

This SPCCP is fully supported by the Fort Carson management and has been reviewed and implemented by the Director of DECAM and the Garrison Commander, as indicated by their signatures on the front page. These individuals possess the level of authority necessary to commit the resources needed to fully implement the plan.

2.6 RECIPROCAL AGREEMENTS

In the event that resources outside of the Fort Carson Fire Department are needed to control a spill, the Fire Department will contact the City of Colorado Springs for support. In addition, the Fort Carson Fire Department will assist city, state, and federal agencies in response to spills near, but outside the Fort Carson boundaries. These organizations have signed a Mutual Firefighting Assistance Agreement that states that the city and the post agree to automatically respond to provide aid and assistance in the event of a fire of other emergency that endangers life and/or property, unless circumstances or resources do not allow for such response and the responding party decides response is not possible. A copy of the signed Mutual Firefighting Assistance Agreement is available for review at the Fort Carson Fire Department, at DECAM, and is included as Appendix B in the Facility Response Plan.

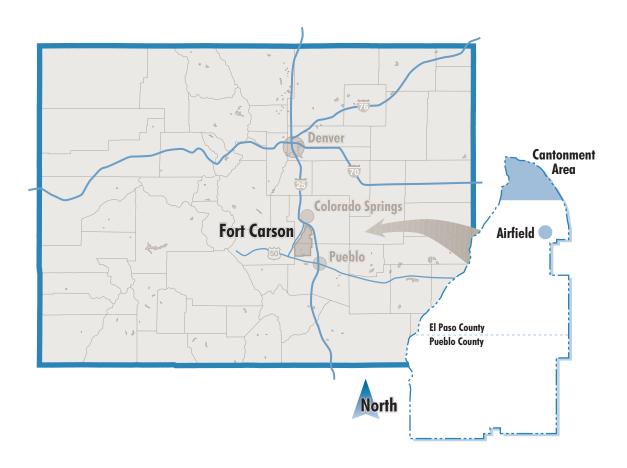


Figure 2.1 General Location Map, Fort Carson, Colorado

BACK OF MAP

3.1 GENERAL

The requirement for an SPCCP is set forth under the Clean Water Act. The basic Federal and Army implementing regulations relating to this SPCCP are summarized in the following paragraphs. The State of Colorado does not have specific SPCCP regulations and utilizes the Federal SPCCP regulations.

3.2 USEPA REGULATIONS

3.2.1 Oil Pollution Prevention and Response

This regulation, codified in 40 CFR 112, requires that an SPCCP be written for any non-transportation-related facility that is engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, or consuming oil or oil products; and which, due to their location, could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States or adjoining shorelines; and that meets at least one of the following criteria:

- Total aboveground oil storage capacity is greater than 1,320 gallons (5,016 liters), or
- Total underground oil storage capacity is greater than 42,000 gallons (159,600 liters).

Fort Carson meets both of the above criteria. A facility matrix identifying all 40 CFR 112 requirements and their location in the Fort Carson SPCCP can be found at the front of the SPCCP.

3.2.2 Resource Conservation and Recovery Act

3.2.2.1 Underground Storage Tanks

The Hazardous and Solid Waste Amendments (HSWA) of 1984 amended the Resource Conservation and Recovery Act (RCRA) by adding Subtitle I, which addresses underground storage of new and used/waste products. Specifically, Subtitle I provides regulatory standards for underground storage tanks (USTs), which are defined as any tank with at least ten percent of its volume buried below the ground, including the volume of any pipes attached to the tank. The underground storage tank regulations can be found in 40 CFR 280.

Tanks used to store heating oil for consumptive use on the premises where stored are exempt from the UST regulations. Army Regulation (AR) 200-1, however, does not exempt heating oil tanks from the regulations. There are no USTs at Fort Carson containing heating oil.

Completely buried storage tanks subject to all of the technical requirements of 40 CFR 280 are not required to comply with SPCCP provisions except that the UST locations must be shown on site diagrams. All UST locations are shown on the Fort Carson building-specific maps.

3.2.2.2 Standards for the Management of Used Oil

The USEPA has promulgated regulations for the handling and storage of used/recycled oil in 40 CFR 279. Containers of used oil at or greater than 55 gallons are also regulated under the SPCCP regulations.

3.2.2.3 Hazardous Waste Storage Tanks

This rule regulates temporary (less than 90 days) storage of hazardous wastes in tanks. At this time, Fort Carson has no tanks used to store hazardous wastes.

3.3 DEPARTMENT OF THE ARMY REGULATION 200-1

AR 200-1, dated 21 February 1997, implements and expands the requirements of 40 CFR 112 in two areas and lists the minimum requirements for Army SPCCPs. It requires a SPCCP for facilities that store, handle, or use hazardous substances in quantities that would threaten human health if accidentally discharged. It also includes policies and procedures specific to the Army for all spills to air, land, and water resources in general.

In addition to the quantities of oil storage that require an SPCCP, AR 200-1 requires a plan if one or more hazardous substances defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) are stored on the installation in amounts greater than the listed reportable quantities and/or if the release of stored hazardous substances in any quantity would present a threat to human health or the environment. It also states that guidelines regarding oil spills also apply to hazardous materials at Army installations.

3.4 DEPARTMENT OF TRANSPORTATION REGULATIONS

3.4.1 Tank Truck Unloading Operations

Because Fort Carson receives bulk fuel shipments by tank truck, specific unloading procedures for tank trucks have been implemented as required by 40 CFR 112.7(e)(4). These procedures meet the regulations and requirements established by the Department of Transportation (DOT). The delivery vendor must employ practices for preventing transfer spills or accidental discharges, and must verify that sufficient capacity is available in the tank prior to filling. He shall be in attendance during all filling operations and monitor all aspects of the delivery, taking immediate action to stop the flow of petroleum in the event of an overfill, equipment failure, or an emergency. The following procedures have been implemented:

- Truck unloading must be performed by trained carriers and must be supervised by facility personnel.
- The driver must not remain inside the vehicle during the unloading and must not leave the immediate area. Product unloading is to be observed at all times.
- Chock truck before unloading to prevent truck movement during transfer.

- Check appropriate storage tank level indicators to verify that tank will hold delivery.
- Verify that spill kits are readily available and that they can retain spilled fuel from reaching navigable waters.
- Verify that tractor engine is shut off during connection of the hoses.
- Verify that unloading connection from tank truck is properly made.
- Place drip pans beneath connections to collect drips or minor spills during connection and/or disconnection.
- Set and/or check periodically for leaks.
- When unloading is complete, verify that desired quantity has been delivered.
- Immediately cleanup any minor spillage.

Trucks must not move until appropriate valves have been closed, connections have been removed, and all valves, lines, etc., have been secured. Trucks should be examined for leaks prior to departure from the unloading area.

4.1 GENERAL

The storage, handling, and transfer containers/areas on Fort Carson that could possibly produce a POL or hazardous material spill have been divided into nine categories based on container/area type. Individual buildings on Fort Carson may have several different categories at a single location. Predictions on the direction, rate, and quantity of flow during a spill event are included in the site-specific attachments for each building.

The nine types of storage, handling, and transfer containers/areas on Fort Carson are:

- Underground storage tanks (USTs)
- Aboveground storage tanks (ASTs)
- Indoor maintenance areas
- Flammable storage lockers/areas
- Outdoor new product storage areas
- Spent product storage areas/hazardous waste satellite accumulation points
- Battery storage areas
- Mobile storage/transfer units
- Electrical equipment (transformers).

Mobile fuel units within the facility, such as fuel trucks and trailers, are also included in this SPCCP as storage, handling, and transfer containers/areas. Mobile fuel storage is also regulated by Federal and State Department of Transportation regulations.

Listings of the first eight types of storage, handling, and transfer containers/areas present on Fort Carson, organized by building number, are presented in Appendix B. Additionally each of these categories is discussed in detail in Section 5.

5.1 GENERAL

The sections below discuss the potential for spills and spill prevention measures at the storage, handling, and transfer containers/areas present on Fort Carson.

5.2 UNDERGROUND STORAGE TANKS

All USTs at Fort Carson have been upgraded to meet current regulations. All tank materials used for oil storage are compatible with the material stored and the conditions of storage. A listing of underground storage tanks at Fort Carson is included in Appendix B as List B-1.

5.2.1 Potential for Spills from Underground Storage Tanks

Spills from USTs are primarily a result of corrosion, poor installation, or poor operating practices such as overfilling, dislodging, or breaking fuel delivery lines. Valve failure is also a potential source of spills. Poor operating practices are usually observable and can be easily remedied by training operators to use care when filling tanks.

5.2.2 Spill Prevention Measures for Underground Storage Tanks

Spill prevention measures for USTs at Fort Carson include personnel training, standard operating procedures, leak detection inspections, inventory control, and integrity testing of the tanks. Specific spill prevention measures are:

- Personnel involved with tank filling and product or waste removal operations from USTs are given training to reduce overfilling and spills.
- Two people should be present and alert during all fuel receiving operations. The UST should be gauged both before and after fuel receiving operations. Prior to dispensing fuel into the UST, the keys to the fuel delivery vehicle should be held by another person to help prevent the delivery vehicle from departing before disconnecting the fuel line.
- If lock-on, latch-open nozzles that allow unattended fuel dispensing are present at a fuel dispensing location, the locks should be disabled so that the lever on the nozzle must be manually held open. Valves remain in a closed and locked position when not in use.
- Facility personnel periodically inspect the area surrounding the USTs for signs of stained soil or dying vegetation that could indicate a leak. The fill pipe and the area surrounding the fill pipe are inspected prior to and immediately following tank filling operations.
- Inventory control consists of one of the following: manual inventory control using a dip stick to gauge the level of product in the tank, leak detection systems in the interstitial space in double-wall tanks, or monitoring systems consisting of observation wells and

conductivity, liquid, and vapor sensors installed in the ground immediately surrounding the USTs.

• Integrity testing of the USTs and associated underground piping will be performed annually. Testing will be accomplished in accordance National Fire Protection Association Standard Test 329, Underground Leakage of Flammable and Combustible Liquids. In general, any test that can detect a loss of 0.05 gallons (0.19 liters) of liquid per hour and accounts for temperature changes, evaporation losses, vapor pockets, tank and piping characteristics, the water table, and tank deflection is acceptable.

5.3 ABOVEGROUND STORAGE TANKS

Fort Carson currently has 145 aboveground storage tanks (ASTs) storing a total of 584,100 gallons of POL. Of the 145 ASTs, only 10 that are used to provide heating fuel and two that provide fuel for the hospital generators are not ConVault tanks. There are no records of any aboveground tank failures at Fort Carson. All tank materials used for oil storage are compatible with the material stored and the conditions of storage. The ConVault tank shell is made of steel, compatible for storage of petroleum-based substances. A seamless, 6-inch reinforced concrete enclosure provides 2-hour fire protection and is impervious to spilled POL. The steel shell is isolated from the concrete encasement to ensure corrosion protection. A high performance, 30mil high-density, polyethylene membrane encloses the primary tank, providing secondary containment within the concrete encasement. A powder coating on all external steel inhibits rusting. The tank rests a minimum of four inches above ground level on concrete support legs, permitting complete visual inspection. Seals, valves, and piping outside the tank containment area are in plain view of facility employees. A detection alarm sounds if a leak occurs and a manual safety valve prevents overfill. A 7-gallon containment basin provides added protection against accidental spills. The tank has no drain valves or exposed dikes that present the potential for storm water contamination. In addition, the concrete enclosure and insulation layers provide thermal protection that minimizes temperature changes. Because of the construction and built-in secondary containment of a ConVault tank, it is highly unlikely that a spill situation would occur.

Those ASTs that are not ConVault tanks have secondary containment designed to contain the volume of the largest tank or container plus sufficient volume for precipitation. The secondary containment is impervious, compatible with the material stored in the AST, and is designed so that any discharge will not escape the containment prior to cleanup.

A list of ASTs at Fort Carson is included in Appendix B as List B-2. Each site-specific building plan contains the location of each AST, as well as a prediction of direction, rate of flow, and quantity of POL or hazardous substance.

5.3.1 Potential for Spills from Aboveground Storage Tanks

ASTs are vulnerable to vehicle collision damage and vandalism. Additionally, spills may occur during tank filling operations.

5.3.2 Spill Prevention Measures for Aboveground Storage Tanks

Spill prevention measures for ASTs at Fort Carson consist of personnel training, standard operating procedures, physical protection, inspections, integrity testing, and secondary containment. Specific spill prevention measures are:

- Personnel involved with tank filling and removal operations are given training to reduce the potential for overfilling and spills.
- Two people should be present and alert during all fuel receiving operations. The AST should be gauged both before and after POL receiving operations. Prior to dispensing fuel into the AST, the keys to the fuel delivery vehicle should be held by another person to help prevent the delivery vehicle from departing before disconnecting the fuel line.
- If lock-on, latch-open nozzles that allow unattended fuel dispensing are present at a fuel dispensing location, the locks should be disabled so that the lever on the nozzle must be manually held open. Valves remain in a closed and locked position when not in use.
- Fences, bollards, and an enforced speed limit generally have eliminated vehicle damage to ASTs.
- ASTs are inspected daily.
- Secondary containment, designed to contain the volume of the largest tank or container plus sufficient volume for precipitation, is provided for all ASTs.
- Accumulated precipitation is removed from the secondary containment system via drains
 manually operated by qualified personnel. The drain valve is closed and locked when not in
 use. The drain is only opened to release accumulated water following a determination that
 the water is free from contamination by the stored product. Any drainage of secondary
 containment must be recorded and maintained.

5.4 INDOOR MAINTENANCE FACILITIES

There are numerous indoor maintenance facilities at Fort Carson. Each building generally has small quantities of lube oils, antifreeze, battery acid, paint products, fuels, and solvents stored on the shop floor and/or in a storage room with other supplies used at the facilities. Although containers holding less than 55 gallons are not subject to the SPCCP regulations, these materials are subject to Army regulations; therefore, storage areas for these materials are identified on the individual building/area maps.

5.4.1 Potential for Spills from Indoor Maintenance Facilities

Indoor maintenance facilities could potentially have spills of POL or hazardous substances as a result of ruptures or leaks from stored containers or from spills during handling and transfer operations, such as oil changes or solvent bath changes. These spills are generally confined within the facility and do not present a threat to the environment. A list of indoor maintenance facilities at Fort Carson is included in Appendix B as List B-3.

5.4.2 Spill Prevention Measures for Indoor Maintenance Facilities

Spill prevention measures for indoor maintenance facilities at Fort Carson primarily involve good housekeeping when handling materials. Specific spill prevention measures are:

- While maintaining an adequate supply, minimize quantities of stored products to reduce the magnitude of a potential spill.
- There should be no floor drains unless they drain to a holding tank. Most shop drains discharge to the sanitary sewer or the industrial wastewater treatment plant; some also have an in-line oil-water separator. Floor drains that do not drain to a holding tank should be covered quickly with a rubber mat if a spill occurs. This also applies to drains that flow to oil-water separators, since many solvents will not be trapped in the separator and/or the holding capacity of a separator may be overcome by a large spill.
- Liquid products are stored away from floor drains and expansion joints, whenever possible.
- Where products are dispensed through taps or spigots in horizontal drums stored on racks, drip pans are employed to catch the inevitable spillage that will occur during use of the drums. Funnels are used when filling small-mouthed containers.
- Whether in the shop or in a storage room, products should be well organized. Only
 compatible substances should be stored together, and routes of egress should not be blocked.
 Containers should be placed so that the labeling, including warnings, can be read without
 moving the containers.
- Hydrophobic and oleophyllic materials (absorb or adsorb oil products, but not water) are readily available. Sheets of sorbent material generally work better than granular materials for this purpose. A rule of thumb is that one bale of sheets will absorb about one 55-gallon (209 liter) spill.
- All personnel know the location of sorbent materials, their capabilities, and how to use them. They are also aware of the location of brooms, mops, shovels, and other spill-control/ cleanup equipment and materials. The location of spill kits is noted on the building specific drawings.

- Emphasis is placed on good housekeeping. Workers must clean up after themselves and immediately report spills from leaking containers or equipment.
- Storage areas and containers are informally observed daily and formally inspected weekly.

5.5 STORAGE AREAS

Storage areas are used to store POL and hazardous substances at Fort Carson. A storage area may be located within a larger building or may be a stand-alone building, such as a Conex-type structure. A list of facilities with POL and/or hazardous substance storage areas is included in Appendix B as List B-4. Each site-specific building plan contains a prediction of direction, rate of flow, and quantity of POL or hazardous substance stored.

5.5.1 Potential for Spills from Storage Areas

The primary cause of spills in storage areas is the handling and dispensing of stored products.

5.5.2 Spill Prevention Measures for General Storage Areas

Spill prevention measures for storage areas at Fort Carson include personnel training, good housekeeping, care in handling stored materials, inventory of stored materials, and secondary containment. Specific spill prevention measures are:

- All personnel who use the storage areas are trained in proper handling, containment, cleanup, and reporting procedures.
- Any spillage is cleaned up by the operator and reported to the EPO for the area. The name and phone number of the EPO should be conspicuously posted outside the storage area.
- Storage areas are periodically inventoried to ensure that products stored in the room are compatible and have not been stored beyond their useful shelf life.

5.5.3 Spill Prevention Measures for Pesticide Storage Facilities

The spill prevention measures for pesticide storage facilities at Fort Carson are personnel training, good housekeeping, care in handling stored materials, inventory of stored materials, and secondary containment. Specific spill prevention measures are:

- All personnel who use the pesticide storage facility are trained in proper handling, containment, cleanup, and reporting procedures.
- Pesticides are stored in single-use rooms that are locked/fenced and fire resistant.
- Pesticides are not stored on wood or other porous materials.

- Pesticides are stored with labels plainly visible. The containers are stored above the ground to allow easy access and are inspected at least monthly to ensure that lids are tight and that they are not leaking.
- Incompatible pesticides are separated to avoid cross-contamination and/or adverse reactions.
- The storage area does not have floor drains.
- The storage area is well ventilated (six room air changes per hour), and the temperature is maintained between 40 and 100 degrees Fahrenheit (4 37 degrees Celsius).
- Emergency procedures are posted near work sites and exits.

5.6 OUTDOOR NEW PRODUCT STORAGE FACILITIES

Fort Carson has several outdoor new product storage facilities that are generally fenced areas with containers of various new products, including POL and hazardous substances. Most of these areas are covered. Drums in the outdoor new product storage facilities may be oriented horizontally or vertically on racks, pallets, or on the ground. The drums may have dispensing taps or manual pumps attached and may be in use. Containers other than drums may also be present in the outdoor new product storage facilities. A list of facilities with outdoor new product storage areas is included in Appendix B as List B-5. Each site-specific building plan contains a prediction of direction, rate of flow, and quantity of POL or hazardous substance stored.

5.6.1 Potential for Spills from Outdoor New Product Storage Facilities

The primary potential for spills from outdoor new product storage facilities is leaking containers and the handling and dispensing of stored products.

5.6.2 Spill Prevention Measures for Outdoor New Product Storage Facilities

The spill prevention measures for outdoor new product storage areas at Fort Carson include personnel training, good housekeeping, care in handling stored materials, inventory of stored materials, and secondary containment. Specific spill prevention measures are:

- All personnel who use the outdoor new product storage facilities are trained in proper handling, containment, cleanup, and reporting procedures.
- Outdoor new product storage facilities are located on a concrete pad with curbing. A cover, such as an awning or roof, is generally present to minimize exposure to snow and rain. Consideration has been given to sand bagging or berming the storage area, if practical, to help contain a spill if necessary.
- Drip pans are placed beneath all dispensing taps used to fill other containers.

- Sorbent materials are available to clean up any spills or leaks.
- Leaking containers are repaired, replaced, or placed in overpack containers immediately upon their discovery.
- All containers have legible labels on them identifying the contents. The containers are oriented so the labels can be read without having to move the containers.
- Only compatible materials are stored together.
- The area is inspected daily and any problems reported to the area EPO.

5.7 HAZARDOUS WASTE SATELLITE ACCUMULATION POINTS/HAZARDOUS WASTE STORAGE FACILITY

Fort Carson has eight hazardous waste satellite accumulation points (SAPs) and a hazardous waste <90-day storage area. The SAPs are used to accumulate small amounts of hazardous wastes prior to transfer to the hazardous waste 90-day storage facility. Federal RCRA regulations, in 40 CFR 260 through 268, govern the storage and handling of hazardous wastes in SAPs and in the 90-day facility. A list of buildings with SAPs is included in Appendix B as B-6.

5.7.1 Potential for Spills from Spent Product Storage

The primary potential for spills is leaking containers and from handling stored products.

5.7.2 Spill Prevention Measures for Spent Product Storage

Spill prevention measures for hazardous waste storage areas at Fort Carson are personnel training, good housekeeping, care in handling stored materials, and secondary containment. Specific spill prevention measures are:

- All personnel who handle hazardous wastes are trained in proper handling, containment, cleanup, and reporting procedures.
- Containers are clearly labeled as containing hazardous wastes; labels must be facing outward to be easily read.
- Waste quantity in the containers is monitored frequently to ensure that the containers are not overfilled.
- Containers are kept closed except when waste product is being added to the container.
- Sorbent materials are available for containing and cleaning up spills.

• Containers are observed daily and formally inspected weekly.

5.8 BATTERY STORAGE FACILITIES

Fort Carson primarily uses the battery storage facility at the DOL battery maintenance shop in Building 8000 for storage of lead-acid batteries. New lead-acid batteries are stored there prior to transportation to individual units; spent lead-acid batteries are stored on pallets at the battery storage facility until transportation to an off-site recycling facility. Small battery storage areas are located in other buildings. All buildings with battery storage areas are included in Appendix B as List B-7. Battery storage areas are identified on each building/area-specific diagram.

5.8.1 Potential for Spills from Battery Storage Facilities

The primary potential for spills from battery storage facilities is leaking and from mishandling of lead-acid batteries.

5.8.2 Spill Prevention Measures for Battery Storage Facilities

Spill prevention measures for battery storage facilities at Fort Carson are personnel training, good housekeeping, care in handling stored materials, and secondary containment. Specific spill prevention measures are:

- All personnel who use the battery storage facilities are trained in proper handling, containment, cleanup, and reporting procedures.
- There are no drains in the vicinity of battery storage areas.
- Floor or sink drains in the spent battery storage area are plugged or covered prior to transfer and handling of acid.
- If acid electrolyte is spilled, the spill is contained, neutralized, and tested with litmus paper or other pH-indicator prior to discharge.

5.9 MOBILE STORAGE

Mobile storage at Fort Carson primarily involves trucks and trailers used to transport petroleum products to aircraft, other vehicles, storage tanks, or individual containers. Mobile units that travel on public highways are exempt from SPCCP requirements and are covered by Department of Transportation requirements.

To prepare for national security obligations and train for military readiness, mobile fuel tankers are often sited for a short duration during training exercises. At these times, spill mitigation devices will be kept in the vehicles and all personnel operating the vehicles will be trained in spill mitigation procedures. When the mobile fuel tankers return to the home facility, the volume of fuel stored in the tankers will be minimized to the greatest extent practicable. If these mobile fuel tankers are

regularly parked with significant amounts of fuel, secondary containment will be provided. A list of facilities at Fort Carson where mobile units are temporarily parked is included in Appendix B as List B-8.

5.9.1 Potential for Spills from Mobile Storage

The primary potential for spills from mobile storage is vehicle collision and handling and dispensing stored products.

5.9.2 Spill Prevention Measures for Mobile Storage

Spill prevention measures for mobile storage are personnel training, good housekeeping, care in handling and dispensing materials, and secondary containment. Specific spill prevention measures are:

- All personnel involved in mobile storage are trained in proper handling, containment, cleanup, and reporting procedures.
- A Mobile Unit SPCCP is kept in each mobile storage unit; drivers should read, understand, and comply with this document.
- All hoses, valves, and connections on mobile storage units are inspected to ensure that they are in proper working order prior to receiving or discharging stored materials.
- Drivers of mobile storage units should remain with the vehicle and be attentive during handling and dispensing stored materials.
- Sorbent materials, shovels, and brooms are carried on mobile storage units to allow for quick cleanup of accidental spills that could occur while handling or dispensing stored materials.
- When parked, mobile storage units are located in an area that will not permit spilled material to get into storm or natural drainage systems in the event of a release. Secondary containment, such as a depressed area or other existing condition that would allow spilled material to be contained, should be considered when locating the parking place.

5.10 ELECTRICAL EQUIPMENT

Electrical equipment can be a source of spills, primarily from vehicle collision and lightening strikes. The only electrical equipment at Fort Carson with the potential to create a spill situation are pole-mounted and pad-based electrical transformers. The locations of electrical transformers at Fort Carson are shown on the map contained in the back of this SPCCP. Transformers are also shown on the individual building/area specific drawings.

6.0 SPILL DIVERSION AND CONTAINMENT EQUIPMENT

6.1 GENERAL

The minimum spill containment and/or diversionary structures or equipment required at Fort Carson storage, handling, and transfer facilities that could potentially spill POL or hazardous substances is discussed in Section 6.2. Section 6.3 identifies the spill response materials that should be stored at these facilities, and Section 6.4 discusses additional spill response materials stockpiled on Fort Carson for response to spills beyond the response capability of individual facilities.

6.2 MINIMUM SPILL CONTAINMENT REQUIREMENTS

Fort Carson does not currently have a formal spill containment and drainage plan because of the large number of relatively small aboveground storage tanks. Secondary containment on these tanks is discussed in Section 5.3. Storm drains and drainage patterns are included on the individual drawings in the building/area-specific portions of this SPCCP. These drawings can be used for containment and drainage planning should a spill occur. Additionally, a large, fold-out map of the storm drainage system is included in the back of this plan.

All storm sewers, as well as the various drainage channels throughout the base, discharge to B-Ditch or to I-Ditch. Both of these major ditches discharge to Fountain Creek, east of Fort Carson, beyond the base boundary. If needed, booms can be placed at any location in these ditches.

All wash racks, etc., associated with the maintenance facilities discharge to oil/water separators and to the Fort Carson industrial wastewater treatment system. The treated water then discharges into I-Ditch. There are no surface water bodies in the containment area. Fishing lakes in the outer areas of the base are non-discharging and are unlikely to be affected by a spill. Should major containment be necessary, DECAM has a variety of earth-moving machinery (bull dozers, graders, etc.) and three trained operators.

6.3 FACILITY SPILL RESPONSE MATERIALS

All facilities that store POL should have the recommended spill response materials listed in Table 6-1 readily available for immediate response and containment of POL spills. Spill response materials should be secured near potential spill sources and used only for timely cleanup of POL spills.

Facilities that store hazardous substances should refer to the Material Safety Data Sheets (MSDS), posted at the work site, for information on appropriate spill control materials. These materials should also be maintained in stock and readily available for response and containment of hazardous substance spills. However, response and containment of hazardous substance spills should not be performed until the MSDS for the spilled substance has been reviewed to determine appropriate health and safety precautions for response personnel. For more information on MSDS and the Fort Carson Hazard Communication Program contact the Fort Carson Safety Office, 526-2123/526-2078.

6.4 FORT CARSON SPILL RESPONSE MATERIAL

Fort Carson maintains additional equipment and materials for spill diversion and containment for response to spills beyond the response capability of individual facilities. This equipment is stored in four separate locations around the installation and is used by both the Installation Fire Department and by DECAM personnel. If access to this additional equipment and materials is necessary to divert or contain a spill of POL or hazardous substance, call the Installation Fire Department at 911.

In the event that resources outside of the Fort Carson Fire Department are needed to control a spill, the Fire Department will contact the City of Colorado Springs for support. In addition, the Fort Carson Fire Department will assist city, state, or federal agencies in response to spills near, but outside the Fort Carson boundaries. These organizations have signed a Mutual Firefighting Assistance Agreement that states that the city and the post agree to automatically respond to provide aid and assistance in the event of a fire of other emergency that endangers life and/or property, unless circumstances or resources do not allow for such response and the responding party decides response is not possible. A copy of the signed Mutual Firefighting Assistance Agreement is available for review at the Fort Carson Fire Department, at DECAM, and is included as Appendix B in the Facility Response Plan.

TABLE 6-1 RECOMMENDED SPILL RESPONSE MATERIALS				
Material	Quantity	NSN Number		
12 GPM (36 lPM) Hand Pump	1	4320-00-595-0762 or 4930-00-294-5110		
Shovel	3	5200-00-293-3336		
Broom, Push, Straw, Heavy Duty	3	7920-00-267-2967		
Handles	3	7920-00-141-5452		
Oil Sorbent Compound	10	7930-00-269-1272		
Vermiculite (20# bag) (9 kg)	2	5640-00-801-4176		
Drum Assemblies (overpack 19-gal) (72 liter)	3	8110-00-753-4643		
Drum Assemblies (overpack 30-gal) (114 liter)	3	8110-01-129-8506		
55-gal or 57-gal overpacks (209 or 217 liter)	3	8110-00-823-8121		
Drum Assemblies (overpack 85-gal)	3	8110-01-101-4055		

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7.1 GENERAL

The countermeasures used for containment and diversion of POL spills on Fort Carson are presented in Section 7.2, while Section 7.3 presents countermeasures for containment and diversion of hazardous substance spills on Fort Carson.

7.2 COUNTERMEASURES FOR POL SPILLS

In the event of a POL spill less than five gallons (18.9 liters), Fort Carson personnel will immediately clean up the spill using the materials and equipment listed in Table 6-1 stored at the building for spill diversion and containment. The materials and equipment should be located at every building that requires a SPCCP. If the spill is near a drain or drainage ditch, Fort Carson personnel should prevent the spilled POL from entering the drain or drainage ditch prior to cleaning up the spill.

In the event of a POL spill greater than 5 gallons (18.9 liters), or if a POL spill enters a drain or drainage ditch or presents a fire hazard, Fort Carson personnel will immediately call the Installation Fire Department at 911, who will respond to the spill. Following notification of the Installation Fire Department, Fort Carson personnel should attempt to stop any additional POL spillage from the spill source and use the materials and equipment stored at the building for spill diversion and containment to reduce or eliminate any further release of POL to drains or drainage ditches. However, personnel should only attempt these actions if there is no fire hazard and if the health and safety of personnel is not jeopardized. Figure 7-1 presents a summary of the spill countermeasures for Fort Carson POL spills.

7.3 COUNTERMEASURES FOR HAZARDOUS SUBSTANCE SPILLS

In the event of a spill of a hazardous substance, Fort Carson personnel should immediately consult the MSDS sheets for the substance spilled and follow the spill cleanup directions in the MSDS. If the proper materials and equipment are available, Fort Carson personnel should attempt to stop any additional spillage from the spill source and use the available materials and equipment to prevent any release of hazardous substance to drains or drainage ditches. No attempt to cleanup the spill should be made if the materials and equipment needed for cleanup, as identified in the MSDS, are not available or if there is an immediate threat to the health or safety of Fort Carson personnel. In this instance, and if there are any questions or confusion concerning fire hazards, personnel health and safety, or appropriate use of spill cleanup materials, Fort Carson personnel should immediately call the Installation Fire Department at 911, who will respond to the spill. Additionally, Fort Carson personnel should immediately call the Installation Fire Department if the hazardous substance spill enters a drain or drainage ditch. Figure 7-2 presents a summary of the spill countermeasures for Fort Carson hazardous substance spills.

FIGURE 7-1 POL SPILL COUNTERMEASURES

POL spill of less than 5 gallons (18.9 liters):

- Stop any additional POL spillage from the spill source.
- Immediately clean up the spill using the materials and equipment stored at the building for spill diversion and containment.
- If a POL spill is near a drain or drainage ditch, Fort Carson personnel should prevent the spill from entering the drain or drainage ditch prior to cleaning up the spill.

POL spill of greater than 5 gallons (18.9 liters):

- Immediately call the Installation Fire Department at **911**.
- Stop any additional POL spillage from the spill source.
- Prevent the POL spill from entering any drain or drainage ditch by using the materials and equipment stored at the building for spill diversion and containment.
- Stand-by for the Fire Department if there is a fire hazard from the POL spill or if the health and safety of personnel is endangered. Do not attempt to divert or contain the POL spill if hazardous environments are present.

FIGURE 7-2 HAZARDOUS SUBSTANCE SPILL COUNTERMEASURES

Hazardous substance spills:

- Immediately consult the MSDS sheets at the spill location for the substance spilled and follow the spill cleanup directions in the MSDS.
- Immediately call the Installation Fire Department at **911** if the materials and equipment specified by the MSDS for spill cleanup are not available or if there are any questions or confusion concerning fire hazards, personnel health and safety, or appropriate use of spill cleanup materials and equipment.
- If proper materials and equipment are available, stop any additional hazardous substance spillage from the spill source.
- Prevent the spill from entering any drain or drainage ditch by using the materials and equipment specified in the MSDS.
- Immediately call the Installation Fire Department at **911** if the hazardous substance spill enters a drain or drainage ditch.

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8.0 PROCEDURES

8.1 GENERAL

Section 8.2 presents the written procedures for security at POL and hazardous substance storage, handling, and transfer facilities, while Section 8.3 provides the SPCCP training requirements for facility personnel. Section 8.4 provides SPCCP inspection procedures, and Section 8.5 presents SPCCP recordkeeping requirements.

8.2 SECURITY

The majority of Fort Carson's POL and hazardous substance storage areas are located within fenced and lighted areas. Units responsible for specific ConVault tanks lock the tanks and limit access to the tank area. All areas are regularly patrolled by Military Police and unauthorized personnel are not permitted free range on the reservation. In addition, since late 2001, Fort Carson has been a closed post. All access gates are guarded 24 hours per day, 7 days per week. Persons without post stickers are issued daily passes that must be displayed. Additionally, a chain-link fence with barbed wire above it is currently under construction around the Cantonment area.

8.3 TRAINING

Each unit and directorate on Fort Carson is represented by an Environmental Protection Officer (EPO) who attends certification training upon appointment and monthly meetings thereafter with DECAM personnel to discuss environmental management issues related to troop and directorate activities. Information pertinent to spill prevention, regulatory compliance, and operational issues is presented to the EPOs for dissemination to the troops and directorate personnel. The EPOs are responsible for coordinating unit and directorate activities. DECAM provides regular training to troops and directorate personnel concerning appropriate spill prevention and spill response activities.

This plan has been prepared to include the basic information necessary to comply with existing laws and regulations. Operating and associated personnel should be familiar with and understand the requirements for and contents of the SPCCP. This will be accomplished by scheduled briefings and required readings at the unit/activity level for each identified potential spill location. All appropriate installation personnel will be made aware of the existence and purpose of the SPCCP through periodic briefings to be conducted at least once every year.

Personnel who work in and around POL and hazardous substance storage, handling, and transfer facilities will be instructed in the contents of this spill plan and in the following:

- Operation and maintenance of equipment, storage, and containment structures that prevent harmful discharges of POL or hazardous substances
- Applicable pollution control laws, rules, and regulations

• Basic response procedures and cleanup material for specific spill events.

Each unit will ensure that all personnel involved in the handling of POL or hazardous substances are properly trained by having them successfully complete a program of classroom instruction or on-the-job training in POL or hazardous substance management and cleanup procedures. This instruction/training will ensure effective response to emergencies; familiarization with emergency procedures and equipment, communications, or alarm systems; response to fires or explosions; incidents of groundwater contamination; and possible shutdown of facility operations.

- All personnel must successfully complete all appropriate training within six months after establishing employment or assignment at each facility.
- Personnel shall not work in unsupervised positions until they have successfully completed all pertinent training requirements in POL or hazardous substance management and cleanup procedures.
- Each unit will ensure that all personnel handling POL or hazardous waste receive an annual review of the initial training requirements.

Each unit must maintain the following personnel documents or records at the facility:

- Employee name and job title for each position at the facility related to hazardous waste management
- Written job description for each position listed above that must include requisite skill, education or other qualifications, and duties of the employee assigned to each position
- Written description of the type and amount of both introductory and continuing training received by each applicable employee
- Records documenting that the training or job experience has been completed by the facility personnel
- Training records on current employees, retained until closure of the facility; records of former employees retained for at least three years.

DECAM is responsible for organizing training programs pertaining to spills of POL and hazardous/toxic substances. Contact the DECAM (526-6999/1699/1730) for information or confirmations. Personnel and spill response training will be conducted at least once each year.

8.4 INSPECTIONS AND RECORDKEEPING

Inspections will be conducted in accordance with written procedures developed for the facility by the unit. These written procedures and a record of the inspections, signed by the appropriate

supervisor or inspector, should be made a part of the site SPCCP. Written inspections and recordkeeping procedures will follow the guidelines listed below and will be attached to the appropriate inspection record.

- Each facility operator will conduct frequent inspections of his/her facility for malfunctions and deterioration of equipment, operator errors, and discharges that may be causing or may lead to the release of POL or hazardous substance to the environment, thereby posing a threat to human health.
- Inspections will be conducted monthly by the units. This frequency is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction of any equipment or operator error goes undetected between inspections.
- Each unit must identify all problems and correct deficiencies immediately in order to avoid any harm to human health or the environment.
- Each unit will develop, follow, and maintain a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are necessary in preventing, detecting, or responding to environmental or human health hazards. The schedule must identify all deficiencies encountered during the inspection and remedial actions implemented to correct the problems.
- All inspections must be recorded in an inspection log and must include, at a minimum, the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions taken.
- All inspection records will be retained within the facility for at least three years from the date of inspection.
- Inspections of procedures and pertinent records may be conducted periodically or at any time by the DECAM or by state or federal authorities in conjunction with the DECAM.
- All underground storage tanks will be gauged for quantity on a daily basis and the results recorded in the unit inventory log. Any noticeable decrease or increase in quantity indicates leakage out or into the tank. If product is added or removed between gauge checks any discrepancy between the gauged quantity and the calculated quantity may indicate leakage. All suspected leaks should be reported to the DECAM and to the Department of Public Works for initiation of cleaning, inspection and needed repairs on a Department of the Army Form 4283-R, Facilities Engineer Work Request.

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APPENDIX A DEFINITIONS

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APPENDIX A DEFINITIONS

<u>Chemtrec</u>. An agency that provides a 24-hour emergency hotline information on hazardous materials. Phone 1(800) 424-9300

<u>Discharge</u>. Includes, but is not limited to, spilling, leaking, pumping, pouring, emitting, emptying or dumping of POL or other hazardous substance; or an action that violates applicable water quality standards, causes a film or sheen or discoloration of the surface of the water, causes a sludge or emulsion to be deposited beneath the surface of the water, or affects the quality of the groundwater.

<u>Disposal Agency</u>. DECAM is responsible for disposal of all hazardous materials/wastes except medical (biological) and radiological wastes generated by the hospital, which are managed by them. The DOL processes all other radioactive waste.

Empty.

- 1) A container or an inner liner removed from a container that has held any hazardous waste, (except a waste that is a compressed gas or that is identified as an acute waste in 40 CFR 261.31, 261.32, or 261.33[e]) is empty if the following conditions exist:
 - a) All wastes have been removed that can be removed using practices commonly employed to remove materials from that type of container, such as pouring, pumping, and aspirating;
 - b) No more than 1 inch (2.5 centimeters) of residue remains on the bottom of the container inner liner; or
 - c) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons (418 liters) in size; or no more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons (418 liters) in size.
- 2) A container or an inner liner removed from a container that has held an acute hazardous waste identified in 40 CFR 261.31, 261.32, or 261.33 (e) is empty if the following conditions exist:
 - a) The container or inner liner has been triple-rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

- b) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal;
- c) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.
- 3) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric pressure.

<u>Hazardous Polluting Substance</u>. An element or compound, other than POL, which, when discharged in any quantity into or upon navigable waters of the United States or their tributaries, presents an imminent or substantial threat to the public health or welfare.

<u>Incompatible</u>. A hazardous substance, material, or waste that is unsuitable for the following:

- 1. Placement in a particular device or facility because it may cause corrosion or decay of containment materials such as container inner liners or tank walls.
- 2. Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic flammable fumes, or gases.

<u>Installation On-scene Coordinator (IOSC)</u>. The official predesignated by the Installation Commander to coordinate and direct Installation responses under the National Contingency Plan.

<u>Installation Response Team (IRT)</u>. Properly trained personnel at Fort Carson who respond to spills of petroleum or hazardous substances.

<u>Local Emergency Planning Committee (LEPC)</u>. The LEPC's primary objective is to develop an emergency response plan and to review it at least annually. This plan evaluates potential hazards and available resources for preparing for and responding to a potential chemical accident. The LEPC is appointed by the state commission and includes, at a minimum, elected state and local officials, police, fire, civil defense, public health professionals, environmental, hospital, and transportation officials.

<u>Major Spill</u>. A discharge of POL of more than 10,000 gallons (38,000 liters) or a discharge of any quantity of material or substance that substantially threatens the public health or welfare or generates wide public interest.

<u>Medium Spill</u>. A discharge of POL of 1,000 to 10,000 gallons (3,800-38,000 liters) or a discharge of any quantity of any material that poses a threat to the public health or welfare.

<u>Minor Spill</u>. A discharge of POL less than 1,000 gallons (3,800 liters) or a discharge of any material in a quantity that does not pose a threat to the public health or welfare.

<u>National Contingency Plan (NCP).</u> Describes procedures that must be followed by agencies and assigns duties and responsibilities for these agencies in the event of a release of petroleum or hazardous substances.

<u>National Response Center (NRC)</u>. Central reporting agency, operated by the Coast Guard, for any release of oil to navigable waters. The NRC is to be notified as soon as the person in charge has knowledge of any reportable discharge of oil.

<u>Navigable Waters</u>. Waters of the United States which are free flowing and eventually connect to a water that is navigable.

<u>Oil</u>. Oil of any kind or in any form, including but not limited to petroleum products, fuel oil, sludge, oil refuse, and oil mixed with wastes.

Overpack Waste. Hazardous materials/waste in containers (five gallons (19 liters) or less) packaged in re-closable top 55 or 85 gallon (209-323 liter) (overpack) drums. Primary containers, glass bottles, cans, etc., are cushioned with absorbent material, vermiculite, diatomaceous earth, or dry sweep.

POL. Petroleum, oils, or lubricants.

<u>Potential Spill</u>. Any accident or other circumstance which threatens to result in the discharge of POL or a hazardous polluting substance.

<u>Public Health or Welfare</u>. All factors affecting the health and welfare of humans, including but not limited to human health, the natural environment, fish, shellfish, wildlife, and public and private property, shorelines and beaches.

Recoverable Waste.

- 1. Reclaimed Waste. A waste of known quality that does not meet the original specification, but which can meet another grade or specification for use in equipment or facilities without re-refining.
- 2. Recycled Waste. A waste that does not meet a particular specification, but which, through processing or re-refining, can be recovered for original and other uses. This includes both hazardous and non-hazardous wastes. The hazardous waste managers must ensure that recoverable wastes are segregated and not mixed with other wastes.

<u>Regional Response Center (RRC)</u>. The RRC is the regional site for pollution spill response activities. It is located in the Region VIII EPA headquarters and provides communications,

information storage and other necessary personnel and facilities to promote the proper functioning and administration of regional spill response operations.

<u>Regional Response Team (RRT)</u>. Program representatives of enforcement, operations, and when appropriate, research and development agencies who provide support to respond to major spills which could endanger human health and the environment.

Reportable Spill. According to FC 200-1, pollution spills must be reported if they:

- 1. Are hazardous to human health, or detrimental to aquatic or terrestrial species of plants or animals:
- 2. Are a threat to, or result in, contamination of underground or surface water;
- 3. Cause a film or sheen upon, or discoloration of the surface of the water or adjoining shoreline, or cause a sludge or emulsion to be deposited beneath the surface of the water or upon the adjoining shorelines;
- 4. Involve a reportable quantity of POL or hazardous substances;
- 5. Are greater than 5 gallons (19 liters) or cover more than 100 ft² (9 square meters); or
- 6. Enter any drain.

<u>Residue</u>. Remains of hazardous substances after all but the least soluble constituents have been removed.

<u>RRT Field Coordinator (RFC)</u>. Coordinates resources of the subregion when a pollution incident overlaps sub-regional boundaries.

<u>Satellite Accumulation Point (SAP)</u>. Designated area where a generator may accumulate no more than 55 gallons (209 liters) of hazardous waste or 1 quart (0.95 liters) of acutely hazardous waste in containers at or near any point of generation where wastes initially accumulate that is under the control of the operator of the process generating the waste.

<u>Sinking Agent</u>. Those chemical or other agents that can physically sink POL below the surface of the water.

<u>Triple Rinsed</u>. A procedure for removing residue from a container by rinsing it three times with a solvent prior to reuse or recycling as scrap metal.

APPENDIX B FACILITY INVENTORIES

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List B-1
Hazard Identification - Inventory of Fort Carson Underground Storage Tanks

Building No.	Tank No.	Facility	Substance	Quantity Stored (gal)	Type/Year Installed	Max. Capacity (gal)	Date Upgraded to 1998 Standards
501	14971-1	52nd Engineers Motor Pool	Antifreeze/ ethylene glycol	1,000	Double-wall fiberglass/1993	1,000	1993
501	14971-2	52nd Engineers Motor Pool	JP-8	10,000	Double-wall fiberglass/1993	10,000	1993
501	14971-3	52nd Engineers Motor Pool	Used oil	2,500	Double-wall fiberglass/1993	2,500	1993
501	14971-4	52nd Engineers Motor Pool	JP-8	20,000	Double-wall fiberglass/1993	20,000	1993
900	14972-1	AAFES Shoppette/Gas Station	Gasoline	10,000	Double-wall fiberglass/1993	10,000	1993
900	14972-2	AAFES Shoppette/Gas Station	Gasoline	10,000	Double-wall fiberglass/1993	10,000	1993
900	14972-3	AAFES Shoppette/Gas Station	Gasoline	10,000	Double-wall fiberglass/1993	10,000	1993
1515	4370-1	AAFES Service Station	Gasoline	10,000	Double-wall fiberglass/1987	10,000	1998
1515	4370-2	AAFES Service Station	Gasoline	10,000	Double-wall fiberglass/1987	10,000	1998
1515	4370-3	AAFES Service Station	Gasoline	10,000	Double-wall fiberglass/1987	10,000	1998
1882	4379-1	3/29 Artillery Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
1882	4379-2	3/29 Artillery Motor Pool	Gasoline	20,000	Single-wall fiberglass/1984	20,000	1998
1882	4379-3	3/29 Artillery Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
1982	4381-1	1/68th AR Battalion Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
1982	4381-2	1/68th AR Battalion Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
1982	4381-3	1/68th AR Battalion Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
3600		AAFES Service Station	Gasoline		Double-wall fiberglass/2001	12,000	2001
3600		AAFES Service Station	Gasoline		Double-wall fiberglass/2001	12,000	2001
3600		AAFES Service Station	Gasoline		Double-wall fiberglass/2001	12,000	2001
8152	4455-1	68th Support Battalion Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
8152	4455-2	68th Support Battalion Motor Pool	Gasoline	20,000	Single-wall fiberglass/1984	20,000	1998
8152	4455-3	68th Support Battalion Motor Pool	Diesel	20,000	Single-wall fiberglass/1984	20,000	1998

Building No.	Tank No.	Facility	Substance	Quantity Stored (gal)	Type/Year Installed	Max. Capacity (gal)	Date Upgraded to 1998 Standards
9072	4464-1	3/3rd ACR Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
9072	4464-2	3/3rd ACR Motor Pool	Gasoline	20,000	Single-wall fiberglass/1984	20,000	1998
9072	4464-3	3/3rd ACR Motor Pool	JP-8	20,000	Single-wall fiberglass/1984	20,000	1998
9606	2410-2	Aviation Fuel Point	JP-8	30,000	Single-wall steel/1965	30,000	1998
9606	2410-1	Aviation Fuel Point	JP-8	30,000	Single-wall steel/1965	30,000	1998
9606	2410-4	Aviation Fuel Point	JP-8	20,000	Single-wall steel/1965	20,000	1998
9606	2410-5	Aviation Fuel Point	JP-8	500	Single-wall steel/1965	500	1998
9628	2813-2	4th Brigade Motor Pool	JP-8	12,000	Single-wall fiberglass/1987	12,000	1998
9628	2813-3	4th Brigade Motor Pool	Gasoline	6,000	Single-wall fiberglass/1987	6,000	1998
					Total	468,000	

List B-2
Hazard Identification - Inventory of Fort Carson Aboveground Storage Tanks

Hazard Identification - Inventory of Fort Carson Aboveground Storage Tanks						
Building No.	Serial No.	Facility	Sub- stance	Quantity Stored (gal)	Type/Year Installed	Max. Capacity (gal)
227	567380	DOL Storage	Used oil	500	ConVault/1992	500
238		Engine Maintenance	Used oil	500	ConVault	500
238		Engine Maintenance	Ethylene glycol	500	ConVault	500
324	567363	DRMO Salvage and Surplus Property	Diesel	1,000	ConVault/1992	1,000
330	567470	DOL Central Issue	Diesel	1,000	ConVault/1992	1,000
633		5 th Armored Vehicle Maintenance	Used oil	1,000	ConVault/1992	1,000
636		DECAM Maintenance	Used oil	500	ConVault/2000	500
636	809132	Vehicle Fueling	Diesel	2,000	ConVault/1996	2,000
636	809133	Vehicle fueling	Gasoline	2,000	ConVault/1996	2,000
749	567466	PCMS Vehicle Maintenance Facility	Used oil	1,000	ConVault/1992	1,000
1014	567278	DOIM Auto Data Processing	Diesel	500	ConVault/1991	500
1382	567310	DPW Roads and Grounds Maintenance	Used oil	1,000	ConVault/1992	1,000
1382	567384	DPW Roads and Grounds Maintenance	Used oil	500	ConVault/1992	500
1382	567387	DPW Roads and Grounds Maintenance	Used oil	500	ConVault/1992	500
1392	570319	43rd ASG Motor Pool	Used oil	1,000	ConVault/1992	1,000
1392	567312	43rd ASG Motor Pool	Used oil	1,000	ConVault/1992	1,000
1392	515808	43 rd ASG Motor Pool	Used oil	1,000	ConVault/1991	1,000
1399		Industrial Pump Station	Used oil	500		500
1399	513783	Industrial Pump Station	Diesel	500	ConVault/2001	500
1430	513782	Post Headquarters	Diesel	1,000	ConVault/1991	1,000
1515	567392	AAFES Service Station	Used oil	1,000	ConVault/1992	1,000
1551	953063	Directorate of Information Management	Diesel	2,000	ConVault/1995	2,000
1682	567261	Base Operations Contractor	Used oil	1,000	ConVault/1992	1,000
1682	333000	Base Operations Contractor	Diesel	6,000	ConVault/1996	6,000
1682		Base Operation Contractor	Gasoline	1,000	ConVault/2001	1,000
1682	57072	Base Operation Contractor	Diesel	2,000	ConVault/1992	2,000
1692	567260	4th Engineer Battalion Motor Pool	Used oil	1,000	ConVault/1992	1,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000

Building No.	Serial No.	Facility	Sub- stance	Quantity Stored (gal)	Type/Year Installed	Max. Capacity (gal)
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860		Heating and Cooling Plant	Fuel oil	40,000		40,000
1860	567243	Heating and Cooling Plant	Diesel	1,000	ConVault/1991	1,000
1882	567471	3/29 Artillery Motor Pool	Used oil	1,000	ConVault/1992	1,000
1982	567379	3 rd BCT-ADA Motor Pool	Used oil	500	ConVault/1992	500
1982	567421	3 rd BCT-ADA Motor Pool	Used oil	500	ConVault/1992	500
1982	567383	3 rd BCT-ADA Motor Pool	Used oil	500	ConVault/1993	500
2031	567378	DCA General Maintenance	Used oil	500	ConVault/1992	500
2031	567428	DCA General Maintenance	Diesel	500	ConVault/1992	500
2031	567313	DCA General Maintenance	Gasoline	1,000	ConVault/1992	1,000
2082	567311	1/68th AR Battalion Motor Pool	Used oil	1,000	ConVault/1992	1,000
2392	567314	1/8th Infantry Battalion Motor Pool	Used oil	1,000	ConVault/1992	1,000
2392	570318	1/8th Infantry Battalion Motor Pool	Used oil	1,000	ConVault/1992	1,000
2427	515805	Auto Craft Shop	Used oil	1,000	ConVault/1991	1,000
2492	570321	1/12 Infantry Battalion Motor Pool	Used oil	1,000	ConVault/1992	1,000
2492	567464	1/12 Infantry Battalion Motor Pool	Used oil	1,000	ConVault/1992	1,000
2692	567388	RHHT/3rd ACR Motor Pool	Used oil	500	ConVault/1992	500
2692	567467	RHHT/3 rd ACR Motor Pool	Used oil	1,000	ConVault/1992	1,000
2792	567382	3 rd ACR/RHHT	Used oil	500	ConVault/1992	500
2792	567328	3 rd ACR/RHHT	Used oil	500	ConVault/1992	500
2992	567465	1/3rd ACR Vehicle Maintenance Shop	Used oil	1,000	ConVault/1992	1,000
2992	567420	1/3rd ACR Vehicle Maintenance Shop	Used oil	500	ConVault/1992	500
3092	567317	1/3rd ACR Motor Pool	Used oil	1,000	ConVault/1992	1,000
3092	570320	1/3rd ACR Motor Pool	Used oil	1,000	ConVault/1992	1,000
3192	567341	2/3rd ACR Motor Pool	Used oil	1,000	ConVault/1992	1,000
3292	570323	2/3rd ACR Motor Pool	Used oil	1,000	ConVault/1992	1,000
3868	515847	Sewage Treatment Plant	Diesel	2,000	ConVault/1991	2,000
3909		Wastewater Treatment Plant	Diesel	2,000	ConVault/1998	2,000
6290	515655	Hospital Heating Plant	Diesel	5,200	ConVault/1991	5,200
6290	515655	Hospital Heating Plant	Diesel	5,200	ConVault/1991	5,200

LIST D-Z	(continu	eu)				
Building No.	Serial No.	Facility	Sub- stance	Quantity Stored (gal)	Type/Year Installed	Max. Capacity (gal)
6290	683529	Hospital Heating Plant	Fuel oil	5,200	ConVault/1992	5,200
7426	982516	10th SFG Vehicle Maintenance Building	Used oil	250	ConVault/1994	250
7426	982515	10th SFG Vehicle Maintenance Building	Used oil	250	ConVault/1994	250
7428	982518	10th SFG Vehicle Maintenance Building	JP-8	5,200	ConVault/1994	5,200
7428	982518	10th SFG Vehicle Maintenance Building	Gasoline	250	ConVault/1994	250
7428	982520	10th SFG Vehicle Maintenance Building	JP-8	10,000	ConVault/1994	10,000
7500	567364	Evans Hospital	Diesel/ gasoline	250/250	ConVault/1992	250/250
7500		Evans Hospital	Diesel	4,000		4,000
7500		Evans Hospital	Diesel	4,000		4,000
7804	809195	Golf Course Maintenance Building	Diesel/ gasoline	1,000/ 1,000	ConVault/1996	1,000/ 1,000
7804	567381	Golf Course Maintenance Building	Used oil	500	ConVault/1992	500
8000	515825	DOL Maintenance Facility	Gasoline	5,200	ConVault/1991	5,200
8000	570720	DOL Maintenance Facility	Diesel	2,000	ConVault/1993	2,000
8000	515653	DOL Maintenance Facility	Diesel	5,200	ConVault/1991	5,200
8000	567394	DOL Maintenance Facility	Used oil	1,000	ConVault/1992	1,000
8000	567469	DOL Maintenance Facility	Used oil	1,000	ConVault/1992	1,000
8000	567472	DOL Maintenance Facility	Used oil	1,000	ConVault/1992	1,000
8000	684347	DOL Maintenance Facility	New lube oil	1,000	ConVault/1993	1,000
8000	684380	DOL Maintenance Facility	New Lube oil	1,000	ConVault/1997	1,000
8000	684358	DOL Maintenance Facility	New lube oil	2,000	ConVault/1993	2,000
8000		DOL Maintenance Facility	Used oil	500		500
8010	684253	Confinement Facility	Diesel	1,000	ConVault/1993	1,000
8030	567227	Division Maintenance Facility	Used oil	1,000	ConVault/1991	1,000
8030	567226	Division Maintenance Facility	Used oil	1,000	ConVault/1991	1,000
8030	515806	Division Maintenance Facility	Used oil	1,000	ConVault/1991	1,000
8030	684379	Division Maintenance Facility	Used oil	1,000	ConVault/1991	1,000
8099	513783	Sewage Pump Station	Diesel	1,000	ConVault/1991	1,000
8099		DOL Maintenance Facility	Used oil	1,000		1,000
8142	567432	68th Support Battalion Maintenance Facility	Used oil	500	ConVault/1992	500

List B-2 (continu	ea)	_	1		
Building No.	Serial No.	Facility	Sub- stance	Quantity Stored (gal)	Type/Year Installed	Max. Capacity (gal)
8142	567441	68th Support Battalion Maintenance Facility	Used oil	500	ConVault/1992	500
8152	567418	68th Support Battalion Motor Pool	Used oil	500	ConVault/1992	500
8152	567435	68th Support Battalion Motor Pool	Used oil	500	ConVault/1992	500
8152	567386	68th Support Battalion Motor Pool	Used oil	500	ConVault/1992	500
8152	567430	68th Support Battalion Motor Pool	Used oil	500	ConVault/1992	500
8200	570317	64th Support Battalion Maintenance Facility	Used oil	1,000	ConVault/1992	1,000
8200	570294	64th Forward Battalion Maintenance Facility	Used oil	1,000	ConVault/1992	1,000
8300	570292	804 th Support Battalion Motor Pool	Used oil	1,000	ConVault/1992	1,000
8472		OMS 5 Maintenance Facility	JP-8	4,000	ConVault	4,000
8472	567380	OMS 5 Maintenance Facility	Used oil	500	ConVault/1992	500
8472	567434	OMS 5 Maintenance Facility	Used oil	500	ConVault/1992	500
8930	570304	Army Reserves Vehicle Maintenance Facility	JP-8	1,000	ConVault/1992	1,000
8930	567279	Army Reserves Vehicle Maintenance Facility	JP-8	500	ConVault/1991	500
8930	491611	Army Reserves Vehicle Maintenance Facility	JP-8	2,000	ConVault/1991	2,000
8930	513026	Army Reserves Vehicle Maintenance Facility	JP-8	2,000	ConVault/1991	2,000
8930	570301	Army Reserves Vehicle Maintenance Facility	JP-8	1,000	ConVault/1992	1,000
8930	567463	Army Reserves Vehicle Maintenance Facility	Used oil	1,000	ConVault/1993	1,000
9072	567468	3/3rd ACR Motor Pool	Used oil	1,000	ConVault/1992	1,000
9072	567395	3/3rd ACR Motor Pool	Used oil	1,000	ConVault/1992	1,000
9248	570475	Hazardous Waste Storage Facility	Used oil	250	ConVault/1992	250
9277	570303	US Naval Reserve Mobile Construction Battalion	Diesel	1,000	ConVault/1992	1,000
9277	567431	US Naval Reserve Mobile Construction Battalion	Used oil	500	ConVault/1992	500
9300	809130	DECAM Wildlife Branch	Diesel	2,000	ConVault/1996	2,000
9300	809129	DECAM Wildlife Branch	Gasoline	2,000	ConVault/1996	2,000
9418	684256	Ammunition Storage Point Office	Diesel	1,000	ConVault/1993	1,000
9551	567440	Range Control	Used oil	500	ConVault/1992	500
9551		Range Control	Diesel	1,000	ConVault	1,000
9551		Range Control	Gasoline	1,000	ConVault	1,000
9602	567242	Air Traffic Control	Diesel	1,000	ConVault/1991	1,000

,	Continu	cu)				
Building No.	Serial No.	Facility	Sub- stance	Quantity Stored (gal)	Type/Year Installed	Max. Capacity (gal)
9604	570736	4/3rd ACR Flight Operations	Used oil	1,000	ConVault/1993	1,000
9609	570327	Heating Plant	Used oil	1,000	ConVault/1992	1,000
9609	683527	Heating Plant	Fuel oil	5,200	ConVault/1992	5,200
9610	567296	Generator Building	Diesel	500	ConVault/1991	500
9613	567241	Pumphouse	Diesel/ diesel	500/500	ConVault/1991	500/500
9620	683559	Heating Plant	Fuel oil	5,200	ConVault/1992	5,200
9620	570325	4/3rd ACR South Hangar	Used oil	1,000	ConVault/1992	1,000
9628	570324	4th Brigade Motor Pool	Used oil	1,000	ConVault/1992	1,000
9628	570322	4th Brigade Motor Pool	Used oil	1,000	ConVault/1992	1,000
9633	567433	4/3rd ACR Hangar	Used oil	500	ConVault/1992	500
9633	570509	4/3rd ACR Hangar	Gasoline	250/250	ConVault/1992	250/250
9635	570326	4/3rd ACR Maintenance	Used oil	1,000	ConVault/1992	1,000
9733	684260	Ammunition Residue Recycling	Diesel	1,000	ConVault/1993	1,000
10009	684258	Turkey Creek Fire Station	Diesel	1,000	ConVault/1993	1,000
10013	570735	Turkey Creek Ranch	Diesel	1,000	ConVault/1993	1,000
10013	684254	Turkey Creek Ranch	Gasoline	1,000	ConVault/1993	1,000
Butts Sewage	809237	Pump Station	Diesel	500	ConVault/1997	500
Butts Road Sewage	809238	Pump Station	Diesel	500	ConVault/1997	500
MPRC	570748	Range Complex	Diesel	2,000	ConVault/1993	2,000
MPRC	684259	Range Complex	Gasoline	1,000	ConVault/1993	1,000
Range 109	809135	Firing Range	Diesel	1,000	ConVault/1996	1,000
Range 109	809134	Firing Range	Gasoline	1,000	ConVault/1996	1,000
					Total	584,100

List B-3

Inventory of Fort Carson Indoor Maintenance Facilities

Building Number	Building Occupant
501	52nd Engineers Motor Pool
633-636	Housing and Vehicle Maintenance
749	FCMS Vehicle Maintenance Facility
1382	43rd ASG Vehicle Maintenance Shop
1392	43rd ASG Motor Pool
1682	Base Operations Contractor Motor Pool
1692	4th Engineer Battalion Motor Pool
1881/1882	3/29 Artillery Motor Pool
1981/1982	HHB Divarty/3rd BCT ADA Motor Pool
2082	1/68th AR Battalion Motor Pool
2392	1/8th Infantry Battalion Motor Pool
2427	Auto Craft Shop
2492	1/12 Infantry Battalion Motor Pool
2692	RHHT/3rd ACR Motor Pool
2792	RHHT/3rd ACR Vehicle Maintenance Facility
2992	1/3rd ACR Vehicle Maintenance Shop
3092	1/3rd ACR Motor Pool
3192	2/3rd ACR Motor Pool
3292	2/3rd ACR Motor Pool
7426	10th SFG Vehicle Maintenance Building
7804/7806	Cheyenne Shadows Golf Course Maintenance Building
8000	DOL Maintenance Facility
8030	Division Maintenance Facility
8110	MATES 64
8142	68th Support Battalion Maintenance Facility
8152	68th Support Battalion Motor Pool
8200	64th Forward Support Battalion Maintenance Facility
8300	3 rd ACR Maintenance
8472	OMS 5 Maintenance Facility
8930	Army Reserves Vehicle Maintenance Facility
9072	3/3rd ACR Motor Pool
9277	US Naval Reserve Mobile Construction Battalion
9604	4/3rd ACR Flight Operations
9606/9620	4/3rd ACR South Hangar
9628	4th Brigade Motor Pool
9633	4/3rd ACR Hangar

List B-4

Inventory of Fort Carson

POL/Hazardous Substance Storage Areas

(other than ASTs or USTs)

Building Number	Building Occupant
207	DPW Paint Shop
220	DOL Motor Pool
318	DRMO Salvage and Material Segregation
324	DRMO Salvage and Surplus Property
330	Central Issue
342	DRMO 90-Day Storage
400	Hazardous Materials Control Center
501	52nd Engineers Motor Pool
633-636	Housing and Vehicle Maintenance
749	FCMS Vehicle Maintenance Facility
1382	43rd ASG Vehicle Maintenance Shop
1392	43rd ASG Motor Pool
1682	Base Operations Contractor Motor Pool
1692	4th Engineer Battalion Motor Pool
1881/1882	3/29 Artillery Motor Pool
1981/1982	HHB Divarty/3rd BCT ADA Motor Pool
2082	1/68th AR Battalion Motor Pool
2392	1/8th Infantry Battalion Motor Pool
2427	Auto Craft Shop
2492	1/12 Infantry Battalion Motor Pool
2692	RHHT/3rd ACR Motor Pool
2792	RHHT/3rd ACR Vehicle Maintenance Facility
2992	1/3rd ACR Vehicle Maintenance Shop
3092	1/3rd ACR Motor Pool
3192	2/3rd ACR Motor Pool
3292	2/3rd ACR Motor Pool
3708	Entomology (Pesticides/Herbicides)
7426/7428	10 th SFG Vehicle Maintenance Building
7500	Evans Hospital
7804/7806	Cheyenne Shadows Golf Course Maintenance Building
8000	DOL Maintenance Facility
8010	Colorado Youth Challenge Corp
8030	Division Maintenance Facility
8110	MATES 64
8142	68th Support Battalion Maintenance Facility
8152	68th Support Battalion Motor Pool
8200	64th Forward Support Battalion Maintenance Facility
8300	3 rd ACR Maintenance
8472	OMS 5 Maintenance Facility

List B-4 (continued) Inventory of Fort Carson POL/Hazardous Substance Storage Areas

Building Number	Building Occupant
8930	Army Reserves Vehicle Maintenance Facility
9072	3/3rd ACR Motor Pool
9248	Hazardous Waste Storage Facility
9277	US Naval Reserve Mobile Construction Battalion
9300	DECAM Wildlife Branch
9550/9551	Range Control
9602/9610/9635	Butts Airfield
9604	4/3 rd ACR Flight Operations
9606/9620	4/3 rd ACR South Hangar
9628	4 th Brigade Motor Pool
9633	4/3 rd ACR Hanger
MPRC Range	Range Support

List B-5 Inventory of Fort Carson Outdoor New Product Storage Facilities

Building Number	Building Occupant
400	Hazardous Materials Control Center
633-636	Housing and Vehicle Maintenance
749	FCMS Vehicle Maintenance Facility
1382	43rd ASG Vehicle Maintenance Shop
1392	43rd ASG Motor Pool
1682	Base Operations Contractor Motor Pool
1692	4th Engineer Battalion Motor Pool
1881/1882	3/29 ARTY Motor Pool
1981/1982	3 rd BCT-ADA Motor Pool
2082	1/68th AR Battalion Motor Pool
2392	1/8th Infantry Battalion Motor Pool
2492	1/12 Infantry Battalion Motor Pool
2692	RHHT/3rd ACR Motor Pool
2792	RHHT/3rd ACR Vehicle Maintenance Facility
3092	1/3rd ACR Motor Pool
3192	2/3rd ACR Motor Pool
3292	2/3 rd ACR Motor Pool
8000	DOL Maintenance Facility
8030	Division Maintenance Facility
8142	68 th Support Battalion Motor Pool
8152	68th Support Battalion Motor Pool
8200	64th Forward Support Battalion Maintenance Facility
8300	3 rd ACR Maintenance
8472	OMS 5 Maintenance Facility
8930	Army Reserves Vehicle Maintenance Facility
9604	4/3 rd ACR Flight Operations
9628	4 th Brigade Motor Pool

List B-6 Inventory of Fort Carson

Hazardous Waste Satellite Accumulation Points/Hazardous Waste Storage Facility

Building Number	Building Occupant
220	Base Operations Contractor (SAP)
6110	PX Photo Lab (SAP)
7500	Evans Hospital (4 SAPs)
8000	DOL Maintenance Facility (Outdoor and 2 SAPs)
9247/9248/9249	Hazardous Waste Storage Facility

List B-7 Inventory of Fort Carson Battery Storage Facilities

Building Number	Building Occupant
501	52 nd Engineers Motor Pool
749	FCMS Vehicle Maintenance Facility
1392	43 rd ASG Motor Pool
1515	PX Gas Station
2792	RHHT/3 rd AACR Vehicle Maintenance
8000	DOL Maintenance Facility
8030	Division Maintenance Facility
8142	68 th Support Battalion Maintenance Facility
8152	68 th Support Battalion Maintenance Facility
9551	Range Control
MPRC	MPRC Range

List B-8 Inventory of Fort Carson Mobile Storage/Transfer Units

Building Number	9	Mobile Units	Size/Gal.	Substance
	<u> </u>	·		
501	59 th QM	M969 Tanker	2,000	JP-8
633	DECAM	Tanker Truck	1,000	varies
1382	10 th CSH	Fuel Pod	100-200	JP-8
1382	739 TH MP	Fuel Pod	300	JP-8
1682	Base Operations	Tanker Truck	300-400	Mogas & Diesel
1682	Base Operations	Tanker Truck	500	Diesel
1692	4 TH ENG	2 M978 (HMMT Truck)	2,500 ea.	JP-8
1882	3-29 FA	M978 (HMMT Truck)	2,500	JP-8
1982	1-44 ADA	M978 (HMMT Truck)	2,500	JP-8
1982	634 TH SIG	M978 (HMMT Truck)	2,500	JP-8
2082	1-68 INF	M978 (HMMT Truck)	2,500	JP-8
2392	1/8 INF	600-gallon Pod on trailer		
2492	1-12 INF	M978 (HMMT Truck)	2,500	JP-8
2692	43 RD ACR	6 TPU Pod B2 17E 7130	1,100 ea.	JP-8
2792	RHHT	M978 (HMMT Truck)	1,000	JP-8
3092	1/3 ACR	6 M978 (HMMT Truck)	2,000 ea.	Diesel
3192	2/3 ACR	15 M978 (HMMT Truck)	2,000	JP-8
3192	2/3 ACR	4 pods B2 17E 7130	6,000 ea.	JP-8
8142	183 RD MAINT	Fuel Pod	400	JP-8
8152	360 TH TRANS	M969 Tanker	500	JP-8
8152	32 ND TRANS	M978 (HMMT Tanker)	250	JP-8
8300	Maintenance Troop	1 Pod B2 17E7130	500	Mogas
8300	Maintenance Troop	1 Pod B2 17E7130	500	Diesel
8300	Maintenance Troop	1.5 Tanker M969A2	5,000	Mogas
8300		1.5 Tanker M969A2	5,000	JP-8
8300	89 TH CHEM	M978 (HMMT Truck)	2,000	JP-8
8300	89 TH CHEM	TPU Pod	500	JP-8
8930	ECS ARMY	M978 (HMMT Truck)	2,000	JP-8
	RESERVES			
9072	3/3 ACR	15 M978 (HMMT Truck)	2,000 ea.	JP-8
9628	4/3 ACR	10 Pods B2 17E 7130	500 ea.	JP-8
9628	4/3 ACR	12 M978 (HMMT Truck)	2,400 ea.	JP-8

APPENDIX C

BUILDING-SPECIFIC SPCC PLAN AND MOBILE STORAGE/TRANSFER FIELD FORM (IF APPLICABLE)

Master List of Buildings January 2004

207	3708
220	3868/3909
238	6110
318	6290
324	7426/7428
330	7500
342	7804
400	8000
501	8010
633-636	8030
749	8099
900	8110
1014	8142
1382	8152
1392	8200
1399	8300
1430	8472
1515	8930
1551	9072
1682	9246/9248/9249
1692	9277
1860/1864	9300
1881/1882	9418
1981/1982	9550/9551
2031	9602/9610/9635
2082	9604
2392	9606/9620
2427	9609/9613
2492	9628
2692	9633
2792	9733
2992	10009
3092	10013
3191/3192	9299
3292	9699
3600	MPRC Range
	Range 109

Fort Carson Cantonment Area

Fort Carson Military Installation Map

Fort Carson Storm Water Lines

Fort Carson Electrical Transformers